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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/664,082	09/16/2003	Peter Tiemann	2002P01748US	5075

7590 01/21/2005

SIEMENS CORPORATION  
INTELLECTUAL PROPERTY DEPT.  
170 WOOD AVENUE SOUTH  
ISELIN, NJ 08830

EXAMINER

KIM, TAE JUN

ART UNIT PAPER NUMBER

3746

DATE MAILED: 01/21/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/664,082

Applicant(s)

TIEMANN, PETER

Examiner

Ted Kim

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-19 and 21-23 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☐ Claim(s) 1-3, 5-8, 11-13 and 18-23 is/are rejected.
- 7) ☒ Claim(s) 4, 9, 10, 14-17 and 21 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                        | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948)                | Paper No(s)/Mail Date. ____   |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date ____   | 6) <input type="checkbox"/> Other: ____                                     |

## DETAILED ACTION

### *Drawings*

1. The drawings are objected to because in Figure 2, flange 41 should be shown (see page 12, line 2). Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as “amended.” If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. The replacement sheet(s) should be labeled “Replacement Sheet” in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

### *Claim Objections*

2. Claims 5, 18, 23 are objected to because of the following informalities:
- claim 5, line 2, before “shaped” –planar—should be inserted for consistency,
  - claim 18, line 4, “the latter” should be replaced for greater clarity.

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- claim 18, line 5, “the inlet” should be – an inlet --,
- claim 18, line 8, “an inlet” should be -- the inlet --,
- claim 23, 2<sup>nd</sup> line from the end, “the latter” should be replaced for greater clarity.

Appropriate correction is required.

*Claim Rejections - 35 USC § 103*

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

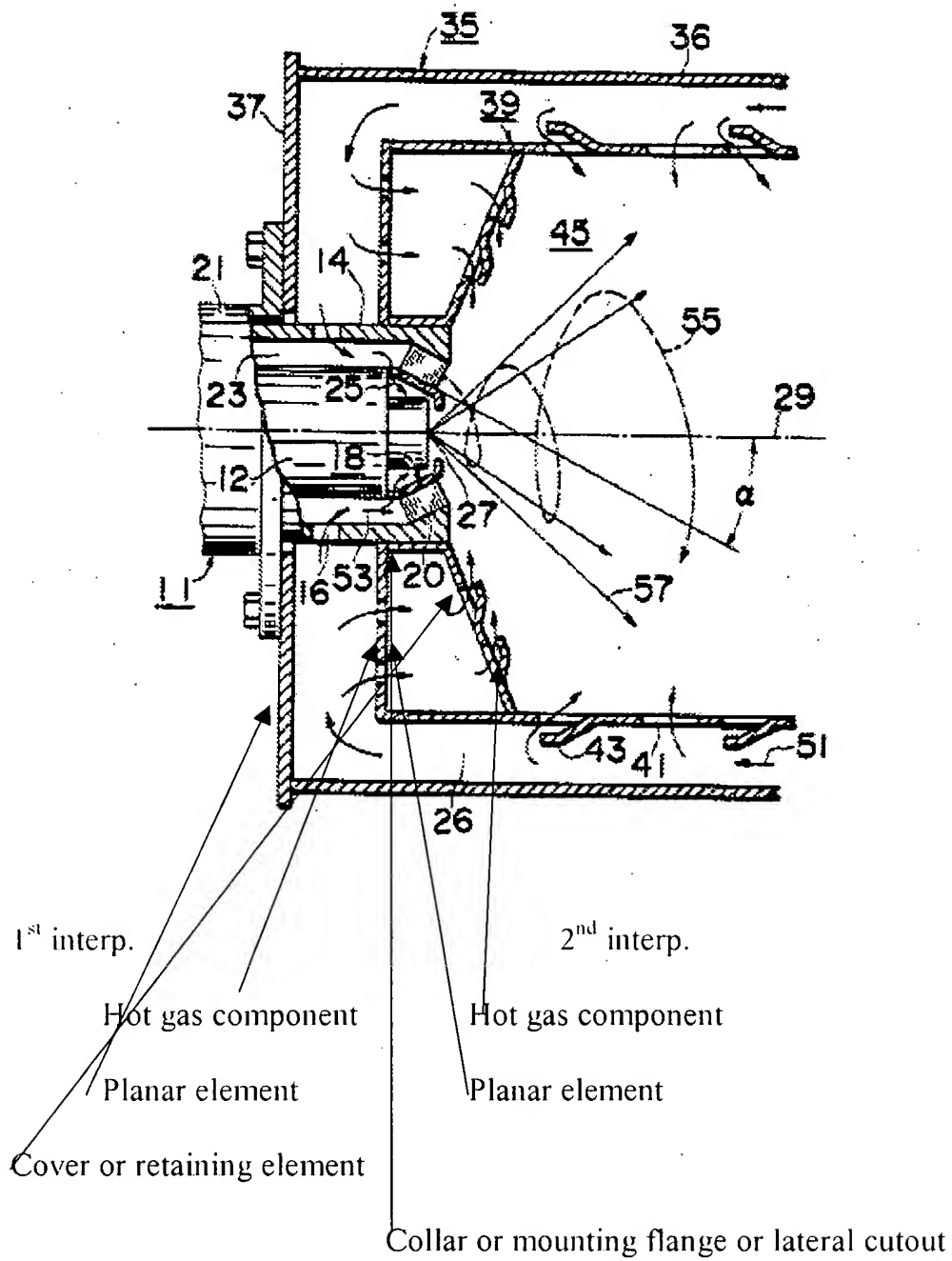
4. Claims 1, 19, 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Zarzalis et al (5,765,376) in view of either Hess (3,563,683) or Sakurai et al (4,216,908). Zarzalis et al teach a combustion chamber for a gas turbine, comprising: a burner insert 9 which can be disposed in an inlet opening (within 23) of the combustion chamber for the purpose of feeding and/or igniting a combustible gas/air mixture; an outlet opening; a hot-gas-path component T2; and a planar shaped element 5 or T1 disposed above and connected to the hot-gas-path component T2; wherein the hot-gas-path component and the planar shaped element collectively form a channel 16 which is fluidically “connected” to a coolant source D2 on a first side and to the burner insert 9 on a second side (see Fig. 1A) where the fluid from D1 is fluidically “connected” to the burner insert 9. Zarzalis et al do not teach the burner insert is closed circuit cooled. Hess teaches a burner insert

which is closed circuit cooled even by air from 5, 4, 3 (col. 2, lines 1-7). Sakurai et al teach a burner insert which is closed circuit cooled, even by air (col. 6, lines 20-27). It would have been obvious to one of ordinary skill in the art to employ closed circuit cooling for the burner insert, in order to extend its life and/or reduce replacement costs by extending its life. The claim language does not require the channel to have flow through the burner insert. Even if it did, it would have been obvious to one of ordinary skill in the art to employ the cooling air of Zarzalis from D1 in the closed circuit cooling of the burner insert, in order to provide for a convenient source of cooling air.

5. Claims 1-3, 5-8, 12, 18, 19, 22, 23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sato et al (3,831,854) in view of either Hess (3,563,683) or Sakurai et al (4,216,908). Sato et al teach a combustion chamber for a gas turbine, comprising: a burner insert 14, 18 which can be disposed in an inlet opening of the combustion chamber for the purpose of feeding and/or igniting a combustible gas/air mixture; an outlet opening; a hot-gas-path component; and a planar shaped element disposed above and connected to the hot-gas-path component, wherein the hot-gas-path component and the planar shaped element collectively form a channel which is fluidically connected to a coolant source on a first side and to the burner insert 14, 18 on a second side. do not teach the burner insert is closed circuit cooled. Hess teaches a burner insert which is closed circuit cooled even by air from 5, 4, 3 (col. 2, lines 1-7). Sakurai et al teach a burner insert which is closed circuit cooled, even by air (col. 6, lines 20-27). It would have been obvious to one of ordinary skill in the art to employ closed circuit cooling for

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the burner insert, in order to extend its life and/or reduce replacement costs by extending its life. The claim language does not require the channel to have flow through the burner insert. Even if it did, it would have been obvious to one of ordinary skill in the art to employ the cooling air of Sato et al via 16 in the closed circuit cooling of the burner insert, in order to provide for a convenient source of cooling air. The inner end of 14 is depicted as detachably connected as the first end 21 is connected via bolts. The stationary turbine blades and rotor blades on the rotor for the turbine are the conventional practice in the art and would have been obvious to employ as the conventional practice in the art.



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6. Claims 11, 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sato et al (3,831,854) in view of Johnson (5,581,999). Sato et al teach various aspects of the claimed invention but do not teach using two adjacent baseplates to form an opening enclosing the burner insert nor the collar being a split ring. Johnson teaches two adjacent baseplates 62 to form an opening 20 enclosing the burner insert and the collar 70, 72 being a split ring. It would have been obvious to one of ordinary skill in the art to employ adjacent baseplates to form the opening and the collar being a split ring, in order to facilitate ease of manufacture/assembly.

***Allowable Subject Matter***

7. Claims 4, 9, 10, 14-17, 21 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

***Contact Information***

Any inquiry concerning this communication or earlier communications from the Examiner should be directed to Ted Kim whose telephone number is 571-272-4829. The Examiner can be reached on regular business hours before 5:00 pm, Monday to Thursday and every other Friday.

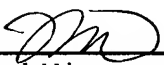
The fax numbers for the organization where this application is assigned are 703-872-9306 for Regular faxes and 703-872-9306 for After Final faxes.



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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Cheryl Tyler, can be reached on 571-272-4834.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist of Technology Center 3700, whose telephone number is 703-308-0861. General inquiries can also be directed to the Patents Assistance Center whose telephone number is 800-786-9199. Furthermore, a variety of online resources are available at <http://www.uspto.gov/main/patents.htm>

		
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Patents Assistance Center	Telephone	800-786-9199